



Repeater: NØDX 145.190 MHz (Input 144.590 / Tone 192.8 Hz)



Home

Meetings

Members

Officers

Newsletter

E. Iowa DX Bulletin

Buy-Sell-Trade

DXCC Card Checking

About EIDXA

History

Constitution & Bylaws

DX Resources

## The Eastern Iowa DX Bulletin

Number 254, December 27, 2024

**Craig Fastenow, KØCF, Editor**

This bulletin is a compilation of **currently active** DX operations (or those that will become active within the current week) from recent issues of the three DX bulletins listed below and other sources. Credit for the source is given at the end of each article.

Articles are ordered by the entity's callsign prefix from the *ARRL DXCC Entities List*. Callsigns used are in **bold** with dates of operation highlighted in **red**. Clickable links are provided for QSL and other information wherever possible. Note that articles may be edited for grammar, language, style and accuracy and will remain in *The Bulletin* while active; articles that are announcements of ongoing operations, or that have no specified end date, will be removed after three weeks.

Also included is a [Propagation](#) section, updated daily; and a [Contest Calendar](#) of upcoming popular contests.

DX News items are courtesy of:

The ARRL DX Bulletin

The bulletin is available at <http://www.arrl.org>

425 DX News, A.R.I. DX Bulletin (425DXN)

Edited by Mauro Pregliasco, I1JQJ & Valeria Pregliasco, IK1ADH

425 DX News Home Page: <https://www.425dxn.org/>

425 DX News Google Group: <https://groups.google.com/g/425eng>

DX Newsletter (DXNL)

Edited by Andreas Salder, DK5ON

A weekly service of DARC Committee "DX", <http://www.darcdxhf.de>

Ohio-Penn DX Bulletin (OPDX)

Edited by Tedd Mirgliotta, KB8NW. Although OPDX is no longer published as a weekly bulletin, Tedd still sends DX news emails.

We will occasionally publish some of them.

Propagation data is from:

National Oceanic and Atmospheric Administration's

[Space Weather Prediction Center](#)

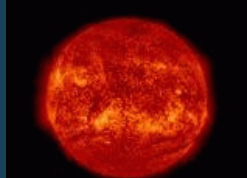
Dr. Tony Phillips' [SpaceWeather.com](http://SpaceWeather.com), used by permission

Contest data courtesy of the [WA7BNM Contest Calendar](#)



### Solar-Terrestrial Data

28 Dec 2024 1813 GMT  
SFI: 259 SN: 233  
A-Index: 4  
K-Index: 0  
X-Ray: C3.9  
304A: 167.8 @ SEM  
Ptn Flx: 64  
Elc Flx: 6720  
Aurora: 1/n=1.99  
Mag (Bz): 0.0  
Solar Wind: 343.9  
Geomag Field INACTIVE  
Sig Noise Lvl S0-S1  
Current Solar Image



<http://www.nonbh.com>  
Copyright Paul L. Herrman 2023

## DX News

**3B8, MAURITIUS.** Thomas, DJ2TG is QRV as **3B8/DJ2TG** until **December 30th**. Activity is holiday style on 30 to 10 meters using SSB, FT8, and FT4. QSL via [DJ2TG](#).

-[ARRL DX Bulletin # 48 December 26, 2024] (1227-0103)

**3D2, FIJI.** Gerhard, OE3GEA is QRV as **3D2GE** from Nadi (OC-016) and Nacula (OC-156) until **January 7th**. Activity is holiday style on 30 to 10 meters using only CW. QSL via [OE3GEA](#).

-[ARRL DX Bulletin # 48 December 26, 2024] (1227-0110)

**4X, ISRAEL.** To celebrate the Jewish holiday of Hanukkah, the Israel Association of Radio Communication (formerly known as Israel Amateur Radio Club) will be running special event stations **4X8NER** and **4Z8NER** from **December 25th to January 2nd**. A certificate will be available: <https://tools.iarc.org/chanukah24/>. QSL via LoTW, eQSL, or via [4Z5MU](#).  
-[425DXN # 1754 December 14, 2024] (1220-0103)

**5R, MADAGASCAR.** Eric, F6ICX is active again as **5R8IC** from Sainte-Marie Island (AF-090), Madagascar **until the end of the year**. He will operate mainly CW on 40-10 meters; during the last two weeks of December he will also be QRV on the QO-100 satellite. QSL via LoTW, [ClubLog's OQRS](#), or via [F6ICX](#).  
-[425DXN # 1742 September 21, 2024] (0927-0103)

**8R, GUYANA.** Aldir, PY1SAD will be active again as **8R1TM** from Georgetown, Guyana from **January 1st to February 8th**. He will operate CW, SSB and digital modes on all bands and via satellite. QSL via LoTW, eQSL, QRZ Logbook, or direct via [PY1SAD](#).  
-[425DXN # 1755 December 21, 2024] (1227-0207)

**9V, SINGAPORE.** Celebrating the 60th anniversary since Singapore became an independent republic (August 9, 1965), Singapore Amateur Radio Transmitting Society's members are allowed to replace their normal prefix (9V1) with the special prefix **S6Ø** from **January 1st through August 9th**. For instance, SARTS President 9V1SA will be using **S6ØSA**.  
-[425DXN # 1756 December 28, 2024] (1227-0117)

**9Y, TRINIDAD & TOBAGO.** Earl, WA3DX will be QRV as **9Y4/WA3DX** from Trinidad (SA-011) from **December 29th to January 14th**. Activity will be 40 to 10 meters using FT8 and FT4. QSL via [WA3DX](#).  
-[ARRL DX Bulletin # 48 December 26, 2024] (1227-0117)

**A4, OMAN.** Special event station **A43QAT** is QRV to mark Qatar's National Day. QSL via [EC6DX](#).  
-[ARRL DX Bulletin # 46 December 12, 2024] (1213-0103)

**CE9, ANTARCTICA.** Oleg ZS1ANF (ex UA1PBA) will be active during his spare time as **ZS7ANF** from Wolf's Fang Runway (AN-016). QRV mostly on CW on 40-10m **until February 2025**. QSL via [DL5EBE](#) or [RK1PWA](#), LoTW.  
-[DXNL # 2436 December 11, 2024] (1213-0103)

**CN, MOROCCO.** Ralf, DB4REB will be active as **CN2REB** while vacationing in Morocco from **November 30th to January 30, 2025**. He plans to operate CW, FT8 and SSB on various bands from Agadir and some POTA sites along the coast. See <https://www.qrz.com/db/CN2REB> for updates. QSL via eQSL, or [DB4REB](#).  
-[425DXN # 1751 November 23, 2024] (1129-0131)

**CT, PORTUGAL.** Celebrating the New Year, special callsign **CS2Ø25HNY** will be active from Portugal on **January 1st-7th**. QSL via [CT1REP](#).  
-[425DXN # 1756 December 28, 2024] (1227-0110)

**DXCC TOP TWENTY.** Here are the top 20 entities on ClubLog's "DXCC Most Wanted" list as of December 27, 2024:

|          |                    |          |                                  |
|----------|--------------------|----------|----------------------------------|
| 1. P5    | DPRK (North Korea) | 11. ZS8  | Prince Edward & Marion Islands   |
| 2. BS7H  | Scarborough Reef   | 12. KH4  | Midway Island                    |
| 3. CEØX  | San Felix Islands  | 13. VKØM | Macquarie Island                 |
| 4. BV9P  | Pratas Island      | 14. PYØS | Saint Peter And Paul Rocks       |
| 5. KH7K  | Kure Island        | 15. KP5  | Desecheo Island                  |
| 6. KH3   | Johnston Island    | 16. VPØS | South Sandwich Islands           |
| 7. 3Y/P  | Peter 1 Island     | 17. ZL9  | New Zealand Subantarctic Islands |
| 8. FT5/X | Kerguelen Island   | 18. FK/C | Chesterfield Islands             |
| 9. YVØ   | Aves Island        | 19. VKØH | Heard Island                     |
| 10. 3Y/B | Bouvet Island      | 20. FT/T | Tromelin Island                  |

For the complete list, see <https://clublog.org/mostwanted.php>  
-[KØCF December 27, 2024] (1227-0117)

**E7, BOSNIA-HERZEGOVINA.** Special event station **E71YOTA** is QRV during the **month of December** during the Youth On The Air operating event. QSL via [ClubLog's OQRS](#).

-[ARRL DX Bulletin # 45 December 5, 2024] (1206-0103)

**FO, FRENCH POLYNESIA.** Hardy, DL7JLL is QRV as **FO/DL7JLL** from Mangareva Island (OC-063) **until January 15th**. Activity is on 20, 15, and 10 meters using SSB. QSL to [DL7JLL](#).

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0117)

**FR, REUNION I.** Thomas, DJ2TG is QRV as **FR/DJ2TG** **until December 23rd**. Activity is on 30 meters and up using SSB and FT8. QSL to [DJ2TG](#).

-[ARRL DX Bulletin # 46 December 12, 2024] (1213-0103)

**FS, SAINT MARTIN.** Oleh, UR5BCP will be QRV as **FS/UR5BCP** from **December 26th to January 2nd**. Activity will be on 40 to 15 meters using CW. This might include activity from Sint Maarten if he obtains a license. QSL via [KD7WPJ](#).

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0103)

**FY, FRENCH GUIANA.** Joe, OZØJ, is QRV as **TOØJ** **until December 31st** on 80-10m (FT8, some CW and SSB) with vertical antennas. For more information see: <https://to0j.oz0j.dk>. QSL via [ClubLog's OQRS](#), LoTW or via [OZØJ](#).

-[DXNL # 2437 December 18, 2024] (1220-0103)

**GW, WALES.** Kev, GWØPUH will be active as **GB9KW** on **January 1st-28th** using vintage equipment manufactured by KW Electronics Ltd during the 1960s and 1970s. Main activity will be over the "KW Weekend" (**January 4th-5th**). Other special callsigns are expected to be on the air, notably **GB2KW** from Scotland, **GB5KWD** and **GB6KW** from England, and possibly others. QSL via operator's instructions.

-[425DXN # 1756 December 28, 2024] (1227-0131)

**HC8, GALAPAGOS IS.** Gus, HC2FG will be active again as **HD8FG** from Santa Cruz, Galapagos Islands (SA-004) from **December 29th to January 3rd**. He will be QRV on 6 meters FT8 only. QSL via LoTW, or [HC2FG](#).

-[425DXN # 1755 December 21, 2024] (1227-0103)

**HL, SOUTH KOREA.** Special event station **HLØYOTA** is QRV during the **month of December** during the Youth On The Air operating event. QSL via [ClubLog's OQRS](#).

-[ARRL DX Bulletin # 45 December 5, 2024] (1206-0103)

**HZ, SAUDI ARABIA.** Special event station **HZ1QATAR** is QRV to mark Qatar's National Day. QSL via [EC6DX](#).

-[ARRL DX Bulletin # 46 December 12, 2024] (1213-0103)

**J7, DOMINICA.** Team **J75K** (FM5WD, IK3ZAQ and IV3JVJ) will be active from Dominica (NA-101) from **December 26th to January 4th**. They will operate SSB, CW and FT8/FT4 on 160-6 meters. See <https://j75k.jimdofree.com> for more information. Log search on ClubLog. QSL via LoTW, or direct to [IV3JVJ](#).

-[425DXN # 1753 December 7, 2024] (1220-0103)

**JD1/O, OGASAWARA.** Harry, JG7PSJ will be QRV as **JD1BMH** from Chichijima (AS-031) from **December 23rd to January 3rd**. Activity will be on 80 to 10 meters using CW, SSB, and RTTY. QSL direct to [JG7PSJ](#).

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0103)

**K, UNITED STATES.** The Straight Key Century Club's annual on-air event, commemorating the club's founding in 2006 and celebrating the original instruments of early radiotelegraphy (straight key, bug and cootie keys), will run on **January 2nd-31st**. Look for **K3Y** to be aired from the ten US call areas (**K3Y/Ø** through **K3Y/9**), plus **/KH6**, **/KL7** and **/KP4**. Information on the event and QSL instructions can be found on <https://skccgroup.com/k3y/k3y.php>.

-[425DXN # 1756 December 28, 2024] (1227-0131)

**K, UNITED STATES.** Club station **W2HRU** will be QRV from **December 30th to January 4th** to mark the 26th annual Ham Radio University educational conference. Look for SSB activity on 80, 40 and 20 meters, as well as FT8 on multiple bands. In addition, a printable QSL Certificate will be available.

Detailed information on <https://hamradiouniversity.org/>. QSL via LoTW, eQSL, the W2 QSL Bureau or direct to [KA2D](#).

-[425DXN # 1754 December 14, 2024] (1227-0103)

**KHØ, MARIANA ISLANDS.** Ken, JO1VRK plans to be QRV as **KHØ/AJ6VJ** from Saipan (OC-086) from **December 30th to January 3rd**. Activity will be on 40 to 10 meters using CW, SSB, RTTY, FT8, and FT4. QSL via LoTW.

-[ARRL DX Bulletin # 48 December 26, 2024] (1227-0103)

**KH9, WAKE I.** Currently stationed on Wake Island (OC-053), Allen, KH7AL is QRV as **KH7AL/KH9** in his spare time. Next planned activities:

December 22nd +/- 20:00 UTC on 10m SSB

December 23rd +/- 08:00 UTC on 17m SSB

December 29th +/- 20:00 UTC on 17m SSB

December 30th +/- 08:00 UTC on 17m SSB

He keeps an "Activation Blog" and an "Upcoming" section on <https://sites.google.com/view/kh7al/>. QSL via [KH7AL](#).

-[425DXN # 1755 December 21, 2024] (1220-0103)

**LA, NORWAY.** Special callsign **LA1ØØA** is the for NRRL's Midt-Troms Gruppen (LA6M, <https://www.la6m.no/>) to use **throughout 2025** to mark the 100th anniversary of the first amateur radio two-way contact between Norway and the US, made by Johannes Diesen, LA1A from Moen in Malselv municipality and UIYB at Dartmouth College, Hanover, New Hampshire (November 25, 1925). QSL via the bureau, QRZ Logbook, or via [LA1ØØA](#).

-[425DXN # 1756 December 28, 2024] (1227-0124)

**LY, LITHUANIA.** Special callsign **LY24XMAS** will be active **throughout December**. LY2QT offers a commemorative coin for 10 QSOs with special event stations carrying an XMAS or HNY suffix; one QSO with LY24XMAS is obligatory and 5 Euro for covering postage; send your application to LY2QT, [ly2qt.wal@gmail.com](mailto:ly2qt.wal@gmail.com). QSL LY24XMAS via [LY2QT](#).

-[DXNL # 2435 December 4, 2024] (1206-0103)

**OE, AUSTRIA.** Special event station **OE65XMAS** is QRV **until January 6th**. QSL via bureau.

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0110)

**OH, FINLAND.** Once again Santa Radio, **OF9X** (Old Father Nine Xmas) will be active on **December 13th-31st** on 160-6 meters CW, SSB and FT8. QSL via Club Log's OQRS, or via OH2BH. Each operator will send his suffix as part of the report (e.g. 599BH for Martti, OH2BH). You can contact a maximum of 16 Santa operators on a variety of bands and modes, which makes up your Santa total score. This time the score card is reported on <https://www.qrz.com/db/OF9X>. The Santa Radio operators are:

|        |              |       |              |
|--------|--------------|-------|--------------|
| Rami   | OH2BCI (BCI) | Juha  | OH2LQ (LQ)   |
| Martti | OH2BH (BH)   | Pekka | OH2TA (TA)   |
| Davide | OH2BLS (BLS) | Henri | OH3JR (JR)   |
| Era    | OH2CV (CV)   | Pauli | OH5BQ (BQ)   |
| Arttu  | OH2FB (FB)   | Alex  | OH5UY (UY)   |
| Jorma  | OH2KI (KI)   | Reijo | OH7GGX (GGX) |
| Jyri   | OH2KM (KM)   | Tero  | OH7WP (WP)   |
| Arto   | OH2KW (KW)   | Esa   | OH7WV (WV)   |

-[425DXN # 1754 December 14, 2024] (1213-0103)

**ON, BELGIUM.** The radio club Verviers (ON4GDV) commemorates the 80th anniversary of Belgium's liberation and the Battle of the Bulge until the end of the year with the callsign **OR8ØUSA**. QSL via [ON4GDV](#).

-[DXNL # 2436 December 11, 2024] (1213-0103)

**ON, BELGIUM.** Special event station **OQ24YOTA** is QRV during the **month of December** during the Youth On The Air operating event. QSL via [ClubLog's OQRS](#).

-[ARRL DX Bulletin # 45 December 5, 2024] (1206-0103)



**OZ, DENMARK.** Special callsign **OZ400POST** will be used by members of Experimenterende Danske Radioamatører to celebrate the 400th anniversary of the Royal Danish Post Office, established on December 24, 1624, under King Christian IV. Watch for activity from **December 24th to January 5th**. See <https://www.grz.com/db/OZ400POST> for information about the Post Award. QSL via [ClubLog's OQRS](#) (preferred), or via the bureau to [OZ1ACB](#).  
-[425DXN # 1755 December 21, 2024] (1220-0110)

**PA, NETHERLANDS.** Special callsign **PC80TT** is the for members of VERON Leiden (PI4LDN) to celebrate the 80th anniversary of the liberation of the Netherlands during World War II (May 5, 1945). Look for activity from **January 1st until June 1st**. The special callsign honors the memory of Rudolf Tappenbeck (PCTT), a pioneer of Dutch amateur radio who died in Neuengamme concentration camp on December 21, 1944. QSL via the bureau to [PI4LDN](#).  
-[425DXN # 1756 December 28, 2024] (1227-0124)

**PA, NETHERLANDS.** Celebrating Christmas and the New Year, special callsign **PH24XMAS** will be active on **December 6th-28th**, followed by **PH25HNY** from **December 28th to January 5th**. Paper QSL cards will not be provided.  
-[425DXN # 1752 November 30, 2024] (1206-0110)

**PA, NETHERLANDS.** Barry, PC1K will be active as **PC24XMAS** in **December**. A certificate will be downloadable from <https://pc1k.nl/xmas> "immediately after making a QSO". QSL via [PC1K](#), LoTW, or QRZ Logbook.  
-[425DXN # 1752 November 30, 2024] (1129-0103)

**PA, NETHERLANDS.** Celebrating Christmas and the New Year, special callsigns **PA24XMAS**, **PD24ELF** and **PI24XMAS** will be active on **December 1st-31st**, while **PD25HNY** will be QRV from **December 24th until January 31st**. See <https://www.grz.com/db/PI24XMAS> for a certificate. QSL cards will not be issued.  
-[425DXN # 1751 November 23, 2024] (1129-0103)

**PACIFIC TOUR.** Reportedly, Gerhard, OE3GEA will be active holiday style from New Caledonia, Fiji, Vanuatu, Samoa, American Samoa and Hawaii from **December 20th to January 21st**:

|                        |                   |                               |
|------------------------|-------------------|-------------------------------|
| December 20th-25th     | <b>TX24HAID</b>   | Noumea (OC-032)               |
| December 25th-Jan. 7th | <b>3D2GE</b>      | Nadi (OC-016)/Nacula (OC-156) |
| December 27th-30th     | <b>YJ0GE</b>      | Port Vila (OC-035)            |
| January 9th-12th       | <b>5W0GE</b>      | Apia (OC-097)                 |
| January 12th-15th      | <b>KH8/OE3GEA</b> | Pago Pago (OC-045)            |
| January 18th-21st      | <b>KH6/OE3GEA</b> | Hawaii                        |

He will operate CW on 30-10 meters. QSL via [OE3GEA](#).

-[425DXN # 1754 December 14, 2024] (1220-0124)

**PACIFIC TRIP.** Hardy, DL7JLL will be active as **FO/DL7JLL** from Mangareva (OC-063), French Polynesia and as **VP6JLL** from Pitcairn Island (OC-044) from **December 18th to January 15th**. He will operate SSB only on 20, 15 and 10 meters. QSL via [DL7JLL](#).  
-[425DXN # 1754 December 14, 2024] (1213-0117)

**PY, BRAZIL.** The Bicho do Mato DX Team celebrates its 10th anniversary with the callsign **ZV2BM** **throughout December**. QSL via bureau, LoTW, eQSL.  
-[DXNL # 2435 December 4, 2024] (1206-0103)

**S5, SLOVENIA.** Special event station **S525PMC** will be active from **December 5th to January 5th** to promote the PMC Contest, sponsored by the Radio Club Slovenj Gradec (S59DCD). The International Association of Peace Messenger Cities was established in 1988 to recognize and encourage the role and responsibility cities have in creating a culture of peace. The PMC Contest, promoting contacts between stations located in the Peace Messenger Cities and the rest of the world, will be held on January 4th-5th. Complete information can be found on <https://www.s59dcd.si/index.php/sl/www-pmc/www-pmc-contest-rules>. QSL via eQSL.  
-[425DXN # 1753 December 7, 2024] (1206-0103)

**SP, POLAND.** Celebrating Christmas and the New Year, special callsigns **HFØCLAUS** and **SPØCLAUS** will be active from **December 6th to January 6th**. QSL via the bureau, eQSL, or direct to Dariusz Florczyk, ul. Kozminska 35, 63-330 Dobrzyca, Poland.

Other special callsigns for the festive season include **3ZØXMAS** (Poland), **EG7FN** (Spain, **December 10th-25th**), **I12XMAS** (Italy, **November 29th-January 6th**), **LY24XMAS** (Lithuania, **December 1st-31st**), **OE65XMAS** (Austria, December 20th-January 6th), **OZ4XMAS** (Denmark), **PD2Ø25HNY** (Netherlands, **December 23rd-31st**), **TM2Ø24MC** (France), **VK6SANTA** (Australia, **December 1st-24th**), **YR8XMAS** (Romania, **December 1st-January 5th**). See their qrz.com pages for more information.

-[425DXN # 1753 December 7, 2024] (1206-0103)

**SU, EGYPT.** Special event station **SU8YOTA** is QRV during the **month of December** during the Youth On The Air operating event. QSL via [ClubLog's OQRS](#).

-[ARRL DX Bulletin # 45 December 5, 2024] (1206-0103)

**T32, EAST KIRIBATI.** The Rebel DX Group is QRV as **T32TTT** from Kiritimati (Christmas Island, OC-024), East Kiribati **until January 1st**. This is a 2-man activity, with planned operations on 160-6 meters CW (two stations), SSB (one station) and FT8/FT4 (as many as twelve stations). QSL via [ClubLog's OQRS](#) for LoTW and direct cards.

-[425DXN # 1755 December 21, 2024] (1220-0103)

**TJ, CAMEROON.** Thierry, TK1CX is QRV as **TJ/TK1CX until the end of February**. Activity is in his spare time on 20 to 10 meters using mostly FT8 and low power. QSL via LoTW, eQSL, or [EA5ZD](#).

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0228)

**UA, EUROPEAN RUSSIA.** Special callsigns **R2Ø25NY** and **UE25NY** will be active from **December 29th to January 8th** for the annual Russian New Year radio marathon organized by the Miller DX Club (<https://mdxc.ru/>). QSL via [RQ7L](#).

-[425DXN # 1754 December 14, 2024] (1227-0110)

**V4, ST. KITTS & NEVIS.** Brian, GW4DVB will be QRV as **V4/G4DVB** from Calypso Bay, St. Kitts (NA-104) from **December 31st to January 6th**. Activity will be on 160 to 6 meters using CW, SSB, and various digital modes. QSL via [GW4DVB](#).

-[ARRL DX Bulletin # 48 December 26, 2024] (1227-0110)

**VP6, PITCAIRN I.** Hardy, DL7JLL, signs **VP6JLL** from Pitcairn Island (OC-044) from **December 18th to January 15th**. QRV on 20, 15, and 10m with 50W and a wire antenna on SSB. QSL via [DL7JLL](#).

-[DXNL # 2437 December 18, 2024] (1220-0117)

**VU, INDIA.** Kaustav, VU2UUU is QRV with special call sign **AT2Ø25 until January 15th** while studying winter propagation, and monitoring solar cycle conditions. Activity is on the HF bands using CW and SSB. QSL via operator's instructions.

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0117)

**YL, LATVIA.** Special event station **YL24YOTA** is QRV during the **month of December** during the Youth On The Air operating event. QSL via [ClubLog's OQRS](#).

-[ARRL DX Bulletin # 45 December 5, 2024] (1206-0103)

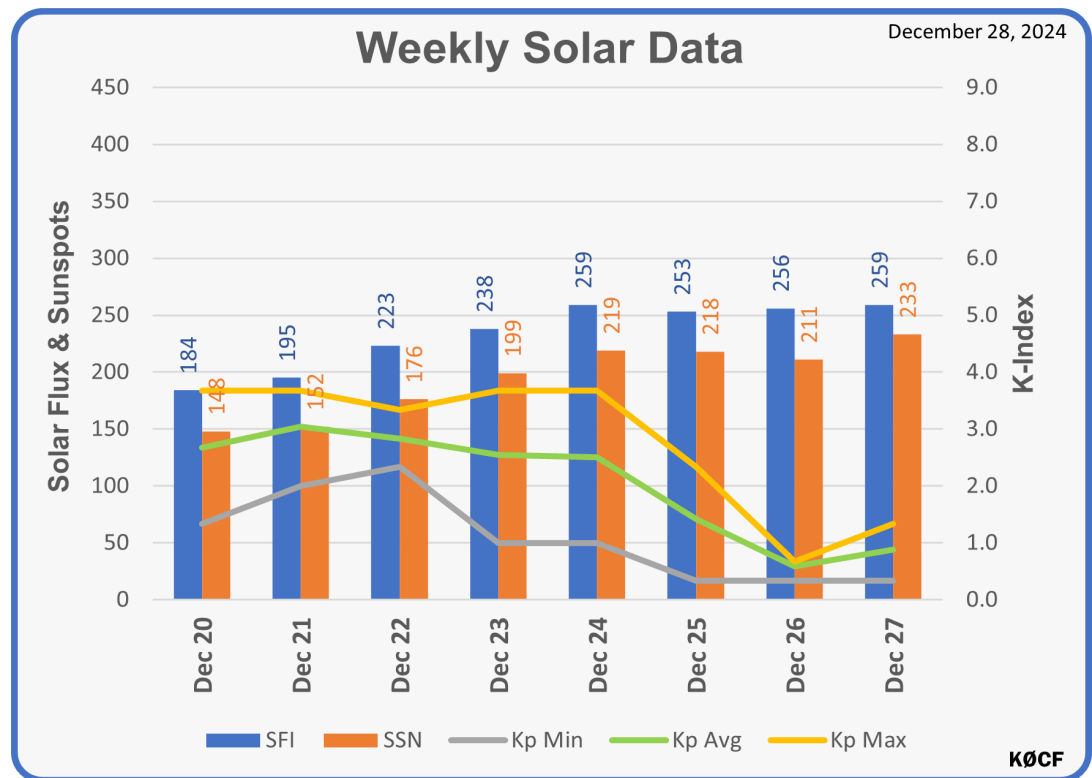
**ZD7, ST. HELENA.** Derek, **ZD7CTO** has been active on 40 meters using FT8 between 0300 and 0400z. QSL direct to [ZD7CTO](#).

-[ARRL DX Bulletin # 46 December 12, 2024] (1213-0103)

**ZS, SOUTH AFRICA.** On May 20, 2025, the South African Radio League will celebrate its 100th anniversary. The SARL Centenary Marathon QSO Party is set to kick off for a year-long operating event starting from **0000 UTC on January 1st and ending at 2359 UTC on December 31st**. Throughout the year, the SARL, with the aid of its members and associated clubs, will be on the air with a special event callsign **ZS1ØØSARL**, as well as the permanent callsigns **ZS6SRL** and **ZS9HQ**, and possibly other special event callsigns. A number of awards will be available, see <https://mysarl.org.za/centenary-marathon/> for more information.

-[425DXN # 1756 December 28, 2024] (1227-0124)

## Propagation (Updated daily)



The Weekly Solar Data chart plots Solar Flux Index (SFI), Sunspot number (SSN) and Planetary K-Index (Kp) for the past 8 days. With 8 Planetary K-index readings each day, only the minimum, average and maximum K-index values are plotted. **Note:** You may click [here](#) or on the chart above to see the same data for the past month.

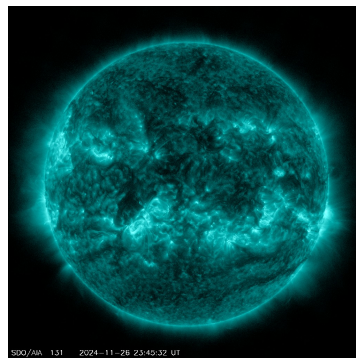
The Daily Solar Flux Index, Sunspot number, Planetary K-index, Solar Flux predictions and Solar Flare data used in this bulletin have been collected by KØCF from the U.S. Department of Commerce's NOAA Space Weather Prediction Center.

The propagation graphs above are the creations of KØCF and are unique in space weather reporting.

*Please Note: The graphs are high resolution .PNG files which you may view in greater detail using your browser's "zoom" feature. Alternatively, right click on the graph and select "Open Image in New Tab" to enlarge it, or "Save Image As..." to save it to your computer for further analysis.*

NASA's current view of the Sun at a wave-length of 131 Angstroms. This wavelength shows incredible solar detail.

Click [here](#) or on the image to view as a full screen 48-hour video loop. It is fascinating!



## Propagation Summary

For the 8 day period from Friday, December 20th through yesterday, December 27th.

The average solar flux was 240, up 67 points from the previous week, with a weekly high of 259 on Friday, December 27th, following a low of 184 on December 20th.

The average sunspot count was 201, up 103 from last week, peaking at 233 on Friday, December 27th after a weekly low of 148 on December 20th.

The Planetary K-index weekly average was 2.8 with a maximum of 3.7 on Tuesday, December 24th, resulting in generally quiet geomagnetic conditions. Yesterday's K-index maximum was 1.3 with generally quiet conditions.

Solar flare activity since December 21st has been high with 12 major flares, the largest of which was an M 8.9 event on Monday, December 23rd.

Propagation Data

Major solar flares, Saturday, December 21st through 1345 UTC, December 28th.

| #  | Date   | UTC  | Mag.  |
|----|--------|------|-------|
| 1  | Dec 28 | 1121 | M 4.5 |
| 2  | Dec 27 | 2035 | M 3.3 |
| 3  | Dec 27 | 1538 | M 1.2 |
| 4  | Dec 26 | 0315 | M 7.3 |
| 5  | Dec 26 | 0030 | M 3.0 |
| 6  | Dec 25 | 0449 | M 4.9 |
| 7  | Dec 25 | 0430 | M 2.8 |
| 8  | Dec 24 | 0841 | M 4.1 |
| 9  | Dec 24 | 0019 | M 4.7 |
| 10 | Dec 23 | 1112 | M 8.9 |
| 11 | Dec 22 | 2049 | M 1.1 |
| 12 | Dec 21 | 0038 | M 1.9 |

(NOAA's graph of recent flare activity: [GOES-X-Ray-Flux](#))

From the NOAA Space Weather Prediction Center, here are the probabilities of major solar flares and the predicted 10.7 cm Solar Flux for the next 3 days. NOAA updates this information daily.

| Date   | M-Flares | X-Flares | Solar Flux |
|--------|----------|----------|------------|
| Dec 28 | 70%      | 20%      | 260        |
| Dec 29 | 70%      | 20%      | 260        |
| Dec 30 | 75%      | 25%      | 240        |

Looking farther ahead, here is the NOAA Space Weather Prediction Center forecast of 10.7 cm radio flux and maximum Planetary K-index (Kp) for the next 12 days. This data is updated by NOAA every Monday (last updated on December 23, 2024).

| Date   | Flux | Kp |
|--------|------|----|
| Dec 28 | 190  | 2  |
| Dec 29 | 190  | 2  |
| Dec 30 | 185  | 2  |
| Dec 31 | 175  | 2  |

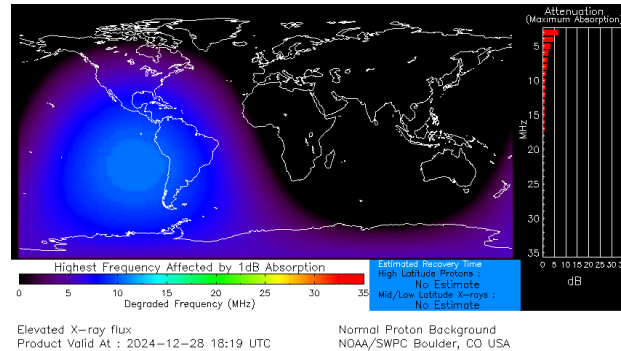
| Date  | Flux | Kp |
|-------|------|----|
| Jan 1 | 180  | 2  |
| Jan 2 | 180  | 2  |
| Jan 3 | 180  | 2  |
| Jan 4 | 175  | 2  |

| Date  | Flux | Kp |
|-------|------|----|
| Jan 5 | 170  | 4  |
| Jan 6 | 170  | 3  |
| Jan 7 | 160  | 2  |
| Jan 8 | 160  | 2  |



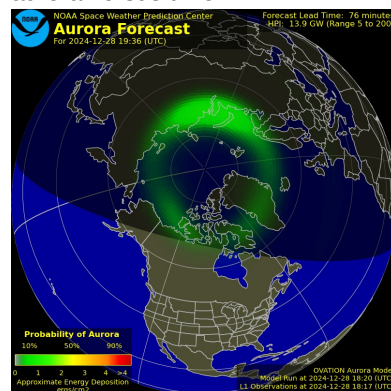
## Global D Region Absorption

Conditions in the D-region of the ionosphere have a dramatic effect on HF communications. The D-Region Absorption map combines the effects of solar particles and photons. Yellow to red colors on the map depict increasing signal attenuation, where the bar chart at the right displays attenuation versus frequency. Click the thumbnail below for an animated map of D-Region Absorption:



## The Aurora Borealis

The aurora is not only beautiful to see but can have a profound impact on HF and VHF radio propagation. For the HF operator, auroras can result in a complete shut-down of propagation. However, on VHF, auroras present interesting DX possibilities. Beam antennas are very desirable and should be pointed north, towards the aurora. Signals are reflected by “back-scatter” and will be distorted with a rough buzz. SSB is the best voice mode to use, but copy can be difficult. CW will have a rough buzzy sound but be perfectly copyable. Click the thumbnail below for an animated map of aurora versus time:



## Highs for Cycle 25

Solar Flux: 336 on August 8, 2024.

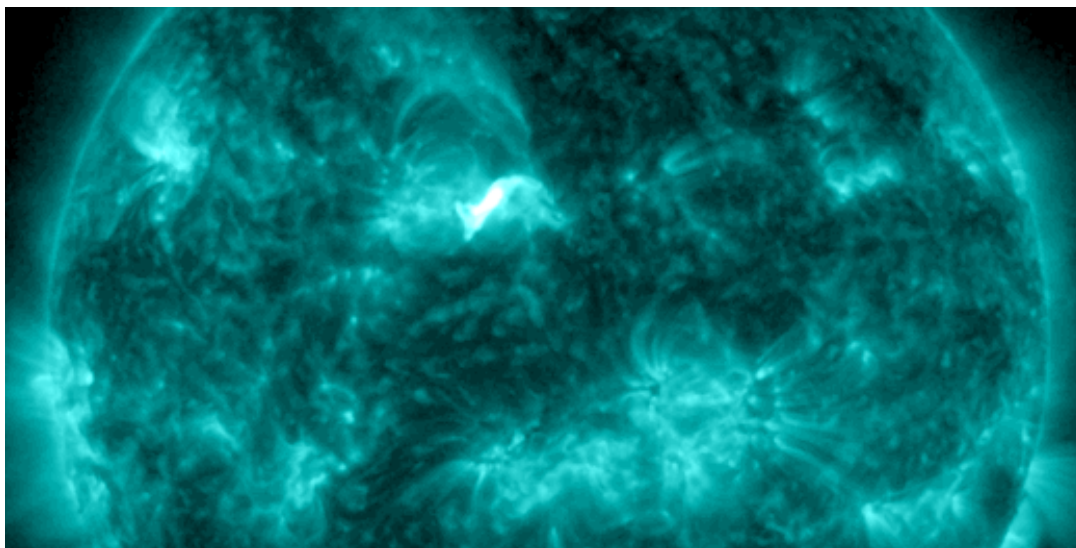
Sunspots: 382 on August 10, 2024.

## Quiet Weekend

No CMEs are heading for Earth. Barring an unexpected impact from a [stealthy storm cloud](#), geomagnetic activity should remain low for the next 3 days with few auroras outside the Arctic Circle. (Copyright © [SpaceWeather.com](#) December 27, 2024. Republished by permission.)

## High Solar Activity

The sun is crackling with solar flares. Witness these four M-class events within a 2 1/2 hour period on Dec. 26th:



Sunspots 3933, 3936 and 3938 are all participating--but not independently. These are "[sympathetic solar flares](#)," one triggering another, then another, in a chain reaction. Sometimes this happens when widely-spaced sunspots are connected by invisible loops of magnetism threading through the sun's high atmosphere.

The four flares pictured above combined to produced [X-ray peaks of M3 and M7](#). If the sunspots continue to work together, a powerful [X-flare](#) may be just a matter of time.

(Copyright © [SpaceWeather.com](#) December 26, 2024. Republished by permission.)

### Popular Propagation web sites

<https://prop.kc2g.com/> (Excellent Maximum Usable Frequency map)

NOAA <https://www.swpc.noaa.gov/>

<https://www.spaceweather.com/>

<https://www.solarham.com/>

<https://dx.qsl.net/propagation/>

### A Propagation Tutorial

The solar X-ray flux tracks solar activity and solar flares. Solar flux, which can vary from as low as 50 to as high as 300, influences the level of ionization in the F2 region of the ionosphere, providing a very good prediction of HF DX conditions. The higher the solar flux, the better conditions will be for the higher HF frequencies and even 6 meters. However, the levels need to be maintained for some days to allow ionization in the F2 layer to build up. A solar flux of 150 results in good HF band conditions, while levels of 200 and up can provide great conditions.

Large X-ray flares on the sun can increase the ionization of the D layer of the ionosphere (a lower layer) on the sunlit side of the Earth, greatly attenuating or blocking HF radio transmissions for up to a half hour. Solar flares often produce Coronal Mass Ejections (CMEs) which, if Earth directed, can lead to geomagnetic storms. Some large flares are also accompanied by strong radio bursts that may interfere with other radio frequencies and cause problems for satellite communication and radio navigation (GPS).

The Planetary K-index is a measure of the magnitude of geomagnetic storms and is an excellent indicator of disturbances in the Earth's magnetic field. A level of 1 or 2 represents quiet geomagnetic conditions; a reading of 3 or 4 may cause some propagation deterioration; 5 and 6 are minor to moderate geomagnetic storms; and 7 to 9 are strong, severe, and extreme storm conditions. Strong geomagnetic storms can trigger Auroral displays and cause HF radio blackouts. Higher geomagnetic activity also has the adverse effect of lowering maximum usable frequencies, much like lower solar flux does.

For best conditions, the solar flux should be above 150 for a few days with the K index below 2. When these conditions are met, some good DX is likely!

-[Compiled from information on NOAA.gov and other sources]

## Contest Calendar

### Weekly Contests

| Contest                | Start UTC |       | End   | Web Site              |
|------------------------|-----------|-------|-------|-----------------------|
| K1USN Slow Speed Test  | Monday    | 0000Z | 0100Z | <a href="#">Rules</a> |
| ICWC Medium Speed Test | Monday    | 1300Z | 1400Z | <a href="#">Rules</a> |
|                        | Monday    | 1900Z | 2000Z |                       |
|                        | Tuesday   | 0300Z | 0400Z |                       |
| CWops Test (CWT)       | Wednesday | 1300Z | 1400Z | <a href="#">Rules</a> |
|                        | Wednesday | 1900Z | 2000Z |                       |
|                        | Thursday  | 0300Z | 0400Z |                       |
|                        | Thursday  | 0700Z | 0800Z |                       |
| Weekly RTTY Test       | Friday    | 0145Z | 0215Z | <a href="#">Rules</a> |
| NCCC CW Sprint (NS)    | Friday    | 0230Z | 0300Z | <a href="#">Rules</a> |

Note: Start Days are in UTC, e.g. Monday at 0000 UTC is Sunday at 7:00 PM in the Central Daylight Saving Time zone, or Sunday at 6:00 PM in the Central Standard Time zone.

### Full Calendar

| Contest                           | Start  |       | End    |       | Web Site              |
|-----------------------------------|--------|-------|--------|-------|-----------------------|
| RAC Winter Contest                | Dec 28 | 0000Z | Dec 28 | 2359Z | <a href="#">Rules</a> |
| Stew Perry Topband Challenge      | Dec 28 | 1500Z | Dec 29 | 1500Z | <a href="#">Rules</a> |
| ARRL RTTY Roundup                 | Jan 4  | 1800Z | Jan 5  | 2400Z | <a href="#">Rules</a> |
| ARRL Kids Day                     | Jan 4  | 1800Z | Jan 4  | 2359Z | <a href="#">Rules</a> |
| YB DX Contest                     | Jan 11 | 0000Z | Jan 11 | 2359Z | <a href="#">Rules</a> |
| North American QSO Party, CW      | Jan 11 | 1800Z | Jan 12 | 0600Z | <a href="#">Rules</a> |
| Hungarian DX Contest              | Jan 18 | 1200Z | Jan 19 | 1200Z | <a href="#">Rules</a> |
| North American QSO Party, SSB     | Jan 18 | 1800Z | Jan 19 | 0600Z | <a href="#">Rules</a> |
| ARRL January VHF Contest          | Jan 18 | 1900Z | Jan 20 | 0359Z | <a href="#">Rules</a> |
| CQ 160-Meter Contest, CW          | Jan 24 | 2200Z | Jan 26 | 2159Z | <a href="#">Rules</a> |
| BARTG RTTY Sprint                 | Jan 25 | 1200Z | Jan 26 | 1200Z | <a href="#">Rules</a> |
| Winter Field Day                  | Jan 25 | 1700Z | Jan 26 | 1700Z | <a href="#">Rules</a> |
| Vermont QSO Party                 | Feb 1  | 0000Z | Feb 2  | 2400Z | <a href="#">Rules</a> |
| 10-10 Int. Winter Contest, SSB    | Feb 1  | 0001Z | Feb 2  | 2359Z | <a href="#">Rules</a> |
| Mexico RTTY International Contest | Feb 1  | 1200Z | Feb 2  | 2359Z | <a href="#">Rules</a> |
| Minnesota QSO Party               | Feb 1  | 1400Z | Feb 1  | 2400Z | <a href="#">Rules</a> |
| British Columbia QSO Party        | Feb 1  | 1600Z | Feb 2  | 2400Z | <a href="#">Rules</a> |
| North American Sprint, CW         | Feb 2  | 0000Z | Feb 2  | 0359Z | <a href="#">Rules</a> |
| CQ WW RTTY WPX Contest            | Feb 8  | 0000Z | Feb 9  | 2400Z | <a href="#">Rules</a> |

|                                    |        |       |        |       |                       |
|------------------------------------|--------|-------|--------|-------|-----------------------|
| ARRL School Club Roundup           | Feb 10 | 1300Z | Feb 14 | 2359Z | <a href="#">Rules</a> |
| <b>ARRL Inter. DX Contest, CW</b>  | Feb 15 | 0000Z | Feb 16 | 2400Z | <a href="#">Rules</a> |
| CQ 160-Meter Contest, SSB          | Feb 21 | 2200Z | Feb 23 | 2159Z | <a href="#">Rules</a> |
| South Carolina QSO Party           | Feb 22 | 1500Z | Feb 23 | 0159Z | <a href="#">Rules</a> |
| North American QSO Party, RTTY     | Feb 22 | 1800Z | Feb 23 | 0600Z | <a href="#">Rules</a> |
| North Carolina QSO Party           | Feb 23 | 1500Z | Feb 24 | 0100Z | <a href="#">Rules</a> |
| <b>ARRL Inter. DX Contest, SSB</b> | Mar 1  | 0000Z | Mar 2  | 2400Z | <a href="#">Rules</a> |
| Open Ukraine RTTY Championship     | Mar 1  | 1800Z | Mar 2  | 1359Z | <a href="#">Rules</a> |
| YB DX RTTY Contest                 | Mar 8  | 0000Z | Mar 8  | 2359Z | <a href="#">Rules</a> |
| Oklahoma QSO Party                 | Mar 8  | 1400Z | Mar 9  | 2100Z | <a href="#">Rules</a> |
| Stew Perry Topband Challenge       | Mar 8  | 1500Z | Mar 9  | 1500Z | <a href="#">Rules</a> |
| Idaho QSO Party                    | Mar 8  | 1900Z | Mar 9  | 1900Z | <a href="#">Rules</a> |
| North American Sprint, RTTY        | Mar 9  | 0000Z | Mar 9  | 0359Z | <a href="#">Rules</a> |
| Wisconsin QSO Party                | Mar 9  | 1800Z | Mar 10 | 0100Z | <a href="#">Rules</a> |
| BARTG HF RTTY Contest              | Mar 15 | 0200Z | Mar 17 | 0200Z | <a href="#">Rules</a> |
| Russian DX Contest                 | Mar 15 | 1200Z | Mar 16 | 1200Z | <a href="#">Rules</a> |
| Virginia QSO Party                 | Mar 15 | 1400Z | Mar 16 | 2400Z | <a href="#">Rules</a> |
| North American SSB Sprint Contest  | Mar 23 | 0000Z | Mar 23 | 0400Z | <a href="#">Rules</a> |
| CQ WW WPX Contest, SSB             | Mar 29 | 0000Z | Mar 30 | 2400Z | <a href="#">Rules</a> |

-[Contest data courtesy of the [WA7BNM Contest Calendar](#) ]